

May 19, 1948.

Dr. Carl F. Robinow,
Dept. Bacteriology,
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Bloomington, Indiana.

Dear Dr. Robinow,

I regret that I did not have the opportunity, either at Yale or at Minneapolis to hear your descriptions of your latest techniques and their results. My wife is interested to examine *Azotobacter* cells to see what she can find regarding their nuclear structure. Have you had occasion as yet to study this organism? I would appreciate it very much if you could send me a summary of the staining procedure that you might suggest to be most applicable to such a bacterium. We have had very little experience with nuclear staining here.

If you are at all interested in vital staining of bacteria, might I suggest that you sometime try "T-Z" (i.e., triphenyltetrazolium chloride)? In the presence of an oxidisable substrate, *E. Coli* rapidly converts this reagent to the insoluble red pigment, formazan, and deposits it in the form of a single large granule, usually near one pole of the cell. The procedure gives the most striking picture I have ever seen in a vital stain. I have no suggestion to explain the localization of the dye. Since it is unlikely that the granule is the nucleus (although this should be ruled out), it points to an additional differentiated site in the bacterial cell.

Finally, may I ask for an exchange of reprints.